

Agilent Ref: 10030712-1
United States Application Serial No. 10/722,950

AMENDMENTS

In The Claims:

Please cancel Claims 2-11, 14, 15, 25, 26, 40-52, and 56.

1. **(Previously Presented)** A method for treating a backing element comprising a gasket for forming a sealed array assay chamber when joined to a microarray substrate, said method comprising at least one of: (1) depositing a component on said gasket, (2) extracting a component from said gasket, (3) surface modifying said gasket, to treat said gasket.

2.-15. **(Canceled)**

16. **(Previously Presented)** The method of Claim 1, wherein said method comprises surface modifying said gasket.

17. **(Previously Presented)** The method of Claim 16, wherein said surface modification comprises contacting said gasket with a plasma.

18. **(Previously Presented)** The method of Claim 17, wherein said plasma is produced from a gas selected from the group consisting of nitrogen, air, argon, oxygen, nitrous oxide, helium, water vapor, carbon dioxide, methane, and combinations thereof.

19.-26. **(Canceled)**

27. **(Previously Presented)** The method of Claim 1, wherein said treating comprises increasing the hydrophilicity of said gasket.

28. **(Currently Amended)** The method of Claim 1, wherein said treating allows ~~provides a seal about~~ said gasket to form a seal.

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29. **(Previously Presented)** The method of Claim 1, wherein said treating comprises sequentially contacting said gasket with at least two of: plasma, UV with O₂ and a solvent.

30.-52. **(Canceled)**

53. **(Previously Presented)** A method for treating a backing element comprising a gasket for forming a sealed array assay chamber when joined to a microarray substrate, said method comprising surface modifying said gasket to treat said gasket.

54. **(Previously Presented)** The method of Claim 53, wherein said surface modification comprises contacting said gasket with a plasma.

55. **(Previously Presented)** The method of Claim 54, wherein said plasma is produced from a gas selected from the group consisting of nitrogen, air, argon, oxygen, nitrous oxide, helium, water vapor, carbon dioxide, methane, and combinations thereof.

56. **(Canceled)**

Please add new claims 57-62.

57. **(New)** A method for treating a backing element comprising a gasket, wherein said method comprises:

surface modifying said gasket to treat said gasket; and
producing a sealed array assay chamber comprising said gasket about at least one array of a microarray assembly.

58. **(New)** The method of Claim 57, wherein said surface modification comprises contacting said gasket with a plasma.

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59. **(New)** The method of Claim 58, wherein said plasma is produced from a gas selected from the group consisting of nitrogen, air, argon, oxygen, nitrous oxide, helium, water vapor, carbon dioxide, methane, and combinations thereof.
60. **(New)** The method of Claim 57, wherein said treating comprises increasing the hydrophilicity of said gasket.
61. **(New)** The method of Claim 57, wherein said treating allows said gasket to form a seal.
62. **(New)** The method of Claim 57, wherein said treating comprises sequentially contacting said gasket with at least two of: plasma, UV with O₂ and a solvent.